



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/764,377

01/19/2001

Shuichi Sakamoto

500.39531X00

7664

24956

7590

03/06/2007

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

LAMBRECHT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/764,377

Applicant(s)

SAKAMOTO ET AL.

Examiner

Christopher M. Lambrecht

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3, 4, and 6-13 have been considered but are moot in view of the new ground(s) of rejection. To the extent that Applicant's arguments against the prior art of record may still apply, these arguments are addressed below.

The Office action mailed July 5, 2006 rejected claims 1, 3, 4, and 6-13 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,006,264 ("Colby"). Applicant's reply, filed October 2, 2006, amended these claims to recite, in part, "a table" that "includes a listing of . . . the plurality of video content play terminals." See, e.g., claim 1. At page 18 of the reply, Applicant asserts that "[t]here is no teaching or suggestion in Colby of a table that includes a listing of the plurality of video content play terminals, as claimed."

The examiner disagrees. Colby discloses "a Client Capabilities Database (CCD)" which "contains information related to the known capabilities of clients" and is queried "for information related to the client making the request" (Colby, col.6 ll.36-41, col.7 ll.15-17,53-54.) Thus, Colby discloses a database that includes a listing of the plurality of clients. Further, the disclosed database is a "table" and the disclosed clients are "video content play terminals" within the meaning of the claims. Accordingly, Colby teaches a table that includes a listing of the plurality of video content play terminals.

At pages 19 and 20 of the reply, Applicant asserts that “Colby does not disclose . . . a table that stores information indicating a correlation between each network route, the total available bandwidth, and the bandwidth currently in use”; and although “the Examiner . . . asserts that such information is furnished by the CSD[,] neither the cited text, nor any other portion of Colby teach or suggest a table, as claimed.”

The examiner maintains that Colby discloses the claimed table. In particular, the Flow Admission Control (FAC) uses information stored in the Content Server Database (CSD) (i.e., a table) to determine whether link bandwidth adequate to support the requested flow exists on the links (i.e., network routes) between the client and each candidate server. The CSD thus stores information that indicates a correlation between each network route, total available bandwidth, and the bandwidth currently in use. Accordingly, Colby teaches a table that stores information indicating a correlation between each network route, the total available bandwidth, and the bandwidth currently in use, as claimed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (Colby), U.S. Patent No. 6,006,267, in view of Nguyen et al. (Nguyen), U.S. Patent No. 6,006,267.

Regarding claim 1, Colby discloses a video content transmitting system (figs.1a-c) having a plurality of video content transmitting servers (figs.1b,c, items 100a-c, 120a,b) and being capable of transmitting requested video contents (col.1 ll.59-65) in response to a request from any of video content play terminals ("clients") connected via a network (fig.1a, item 100) to said plurality of video content transmitting servers (col.5 l.43-col.6 l.2), said video content transmitting system comprising: means for storing (fig.23, item 1110, col.19 ll.44-62) information of a plurality of network protocols (e.g., TCP, UDP; col.49-58) capable of video content transmission between the plurality of video content play terminals and the plurality of video content transmitting servers (col.6 ll.35-56), said means for storing information including a table of protocols for facilitating communication for each combination of one of the plurality of said video content transmitting servers and one of the plurality of said video content play terminals,

wherein the table includes a listing of the plurality of network protocols (col.6 ll.50–54), the plurality of video content transmitting servers (col.6 ll.54–63), and the plurality of video content play terminals (“CCD”, col.7 ll.15–19, 53–57), and means for selecting a video content transmitting server from the plurality of video content transmitting servers (col.6 ll.64–67) based on a protocol determination of the protocols of the table in respect of the video content play terminal issuing the request to thereby determine the video content transmitting server capable of transmitting said requested video contents to the video content play terminal requesting said video content transmission (col.7 ll.1–3, col.9 ll.4–9, col.14 ll.20–24, col.14 l.66–col.15 l.48).

Colby fails to disclose the table of protocols indicates a correlation between each of the plurality of protocols and a corresponding combination of one of the plurality of said video content transmitting servers and one of the plurality of video content play terminals, and each of the plurality of protocols is specified for a corresponding network route for video content transmission between each of the plurality of video content transmitting servers and each of the plurality of video content play terminals.

In an analogous art, Nguyen discloses a table of protocols (fig.3) that indicates a correlation between each of a plurality of protocols (e.g., TCP, UDP; col.3 ll.1–16) and a corresponding combination of one of a plurality of servers and one of a plurality of clients (col.3 l.37–col.4 l.22), and each of the plurality of protocols is specified for a corresponding network route for content transmission between each of the plurality of servers and each of the plurality of clients (col.4 ll.23–27). Nguyen further discloses that

the table facilitates efficient transmission of information among hosts with different communication protocol capabilities (col.5 ll.30–37, col.1 ll.35–55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means for storing information disclosed by Colby to indicate a correlation between each of the plurality of protocols and a corresponding combination of one of the plurality of said video content transmitting servers and one of the plurality of video content play terminals, wherein each of the plurality of protocols is specified for a corresponding network route for video content transmission between each of the plurality of video content transmitting servers and each of the plurality of video content play terminals, as taught by Nguyen, for the benefit facilitating more efficient video content transmission.

Regarding claim 3, Colby and Nguyen together disclose a video content transmitting system according to claim 1 (see above). Colby further discloses said network includes at least a first network (100a, col.5 ll.33–36) and a second network (network formed of switch 110 and web servers 100a–c, 120a,b), in one transmission mode, the first network (100a) is used when a video content transmission request is transmitted to the video content transmitting system from the video content play terminal (i.e., from end-station to switch 110, see figs.1a,b) and the second network is used when the video contents are transmitted from the video content server to the video content play terminal in response to said video content transmission request (i.e., requested content flows from selected server back to end station through switch 110); and said video

Art Unit: 2623

content transmitting system further comprises: means for storing an address for identifying the video content play terminal (i.e., forwarding table containing IP address of end-station, col.1 ll.22–26, necessary for network address routing performed by switch 110, col.6 ll.5–30) that issued the video content transmission request via the first network and an address for identifying the video content play terminal receiving the video contents via the second network (i.e., network address of the end station); and means for determining a video content destination address to which the video contents are transmitted, in accordance with the stored addresses of the video content terminal on the first and second networks (col.16 ll.5–16).

Regarding claim 4, Colby and Nguyen together disclose a video content transmitting system as applied to claim 1, above. Colby further discloses means (flow admission control (FAC), fig.2, content-aware flow switch 110, fig.1b) for managing information of a total available bandwidth (PortBW) for video content transmission of a network route between each video content play terminal and each video content play terminal and each video content transmitting server (col.15 ll.2–12) and information of a bandwidth now in use (existing QoS tags) for the video content transmission (col.15 l.49–col.16 l.4); bandwidth calculating means (FAC) for calculating a bandwidth of the network route to be used for transmission of requested video contents (QoS requirements of content request, col.14 ll.8–16); and transmission processing means for determining the video content transmitting server capable of transmitting the requested video contents to the requested video content play terminal among the plurality of video content

transmitting servers (col.6 l.64–col.7, col.8 ll.6–12), in accordance with the total available bandwidth, the bandwidth now in use in the table and the calculated bandwidth necessary for video content transmission determined by said bandwidth calculating means (col.14 ll.5–19).

Regarding claim 6, see Colby and Nguyen as applied to claim 3, above.

Regarding claim 7, Colby and Nguyen together discloses a video content transmitting system as applied to claims 1 and 4, above, wherein said transmission processing means selects a video server in accordance with the stored network protocol information (video server selection is based upon whether or not candidate servers can support quality of server (QoS) requirements of content request, col.14 ll.8–16, and the QoS requirements are calculated based upon (1) the protocol with which the content is to be delivered, i.e., TCP or non-TCP, and (2) client bandwidth; see col.15 l.2–col.16 l.4., where said protocol is determined by the server, col.1 ll. 59–65, and maintained at the CSD server records database, col.6 ll.58–63) and/or in accordance with the total available bandwidth, the bandwidth now in use and the calculated necessary bandwidth for video content transmission (col.14 ll.5–19).

Regarding claim 8, see Colby and Nguyen as applied to claim 3, above.

Regarding claims 9–11, Colby and Nguyen together disclose the claimed methods as applied to claims 1, 4, and 7, above.

Regarding claim 12, Colby and Nguyen together disclose a video content transmitting method according to claim 11, wherein said table for storing information of a

Art Unit: 2623

network protocol usable for video content transmission between the video content play terminal and the video content transmitting terminal can select a network protocol in accordance with the request by the video content play terminal and a network infrastructure (Nguyen, col.5 l.38–col.6 l.27).

Regarding claim 13, Colby and Nguyen together disclose a video content transmitting system according to claim 7, wherein said network information storing means includes a table storing a name of each network protocol capable of video content transmission between each terminal and each video content transmitting server (Colby, col.6 ll.50–63), wherein said bandwidth information managing means includes a table storing information indicative of a relation between each network route, the total available bandwidth and the bandwidth now in use (see Colby as applied to claim 4, above).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See, e.g., U.S. Patent Nos.: 6,898,800 (fig.3); 6,643,258 (fig.6); 6,609,153 (figs.14, 21, col.12 ll.40–63, col.15 ll.13–54); 6,594,699 (col.3 l.5–col.6 l.49); 6,542,496 (fig.10); 6,470,378 (abstract); 6,421,726 (abstract); 6,400,681 (abstract); 6,356,947 (col.5 l.38–col.6 l.35); 6,266,701 (abstract); 6,208,952 (fig.12); 6,119,170 (figs.3a-g); 6,154,444 (figs.3a,b); 5,948,069 (fig.13); 5,930,259 (fig.13); 5,805,804 (figs.4,12).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2623

6. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on Mon-Fri, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M. Lambrecht
Examiner
Art Unit 2623

cml


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600